VESTRA Resources, Inc.
962 Maraglia Street
Redding, California 96002
mapmaker@vestra.com
http://www.vestra.com
March 7, 2005
530/223/2585
FAX 530/223/1145

70467

Katie Bowman
California Regional Water Quality Control Board
Central Valley
415 Knollcrest Drive, Suite 100
Redding, CA 96002

Re: Sludge Characterization
Winnemucca Trading Company,
Former Shasta Pulp and Paper Mill

Dear Ms. Bowman:

This letter is to update the Regional Water Quality Control Board (RWQCB) on the status of sludge characterization at the Winnemucca Trading Company ponds (Former Shasta Paper Company). Site and pond locations are shown on (Figure 1 and Figure 2). VESTRA Resources, Inc. (VESTRA) has been retained by Winnemucca Trading Company to sample the sludge material in the treatment lagoons and clarifier as requested in Cleanup and Abatement Order No. R5-2004-0717 (Order).

At the request of Winnemucca Trading Company, VESTRA conducted initial pond sampling in December 2004. Two composite samples were collected, one from each pond and submitted for analysis. A summary of the results of the two samples follows:

- **Background**: Background soil concentrations for dioxin in North America range from 0.002 and 0.014 ppb. The Anderson Mill Site value of 0.002 ppb exceeds this range.

- **Health risk:** Preliminary remediation goals developed by EPA for dioxin, based solely on health risk, are 0.004 ppb for residential exposure and 0.027 ppb for industrial exposure. The Anderson Mill Site value of 0.002 ppb exceeds the residential level, but not the industrial level.

- **TTLC:** The total threshold limit concentration (TTLC) for dioxin is 10 ppb. The Anderson Mill Site did not exceed this level.

- **Recent EPA Guideline:** EPA recently issued guidance that residual dioxin levels of between 5 ppb and 20 ppb are acceptable for commercial site development (EPA, 1998). The Anderson Mill Site values fall below this range.

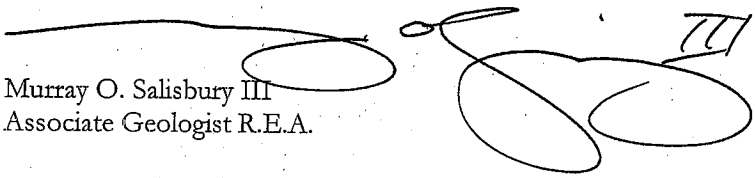
Because of the cost of dioxin analysis Winnemucca Trading Company has requested a phased sampling effort to respond to the Order. The next phase will be to collect a series of depth specific analysis from Ponds 1 and 2 and the clarifier.

VESTRA is preparing to conduct the next phase during the week of March 14, 2005. Quantities of material will also be estimated. Due to the length of time that is required to analyze for dioxins (on average a month turnaround time), VESTRA formally requests to delay the preparation of the closure plan until June 15, 2005. This will allow Winnemucca Trading Company time to obtain analytical data from the field sampling and based on the chemical concentrations from this phase of sampling (1) to determine an appropriate method for the sludge material or (2) obtain additional samples.

Please to call me, or Wendy Johnston, at (530) 223-2585 if you have any questions.

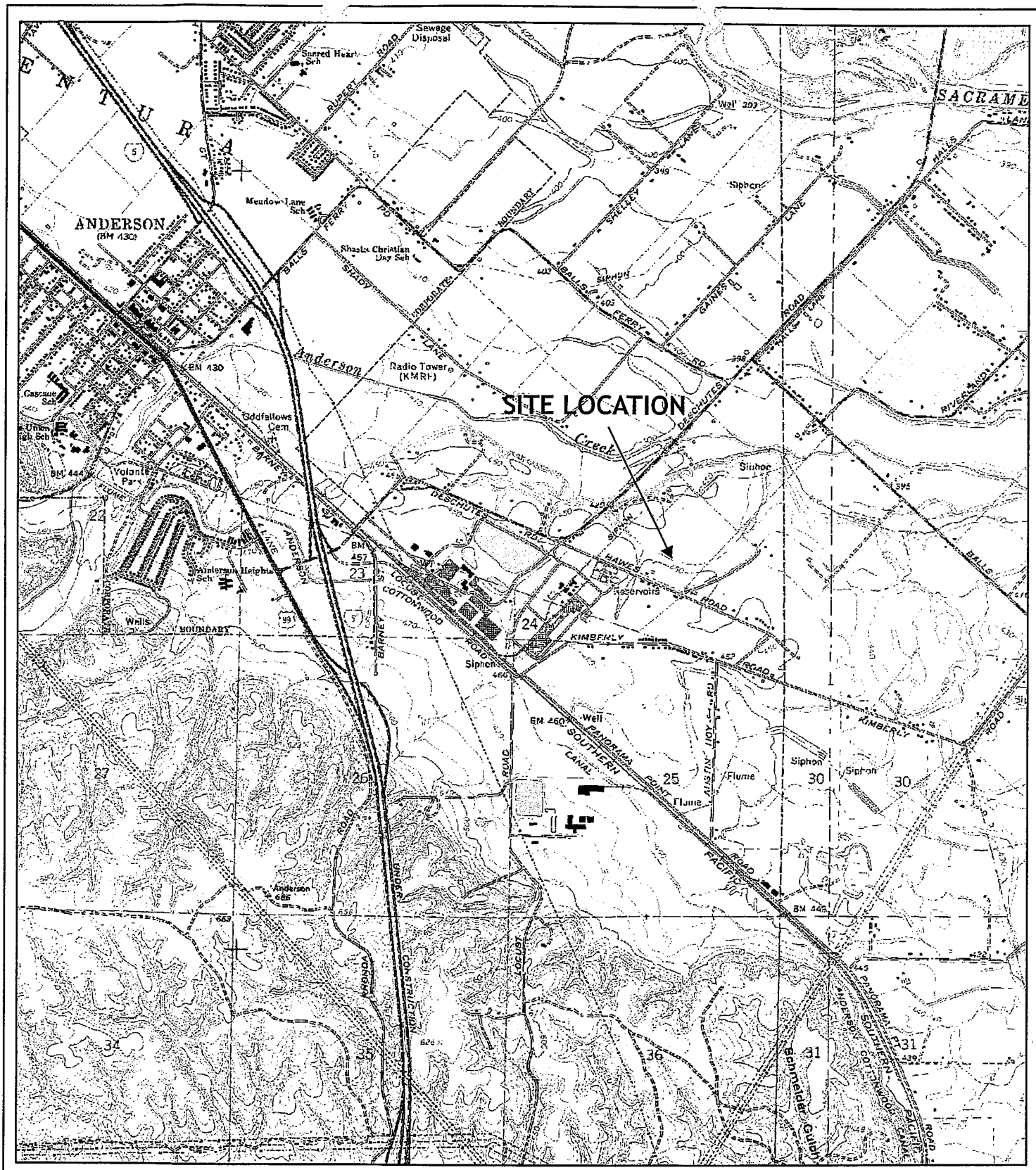
Sincerely,

VESTRA Resources, Inc.
Environmental Services Division



Murray O. Salisbury III
Associate Geologist R.E.A.

cc: Mike Sommers/Winnemucca Trading Company
Jack Reese/Reese, Smalley, Wiseman & Schweitzer LLP
Wendy L. Johnston/VESTRA



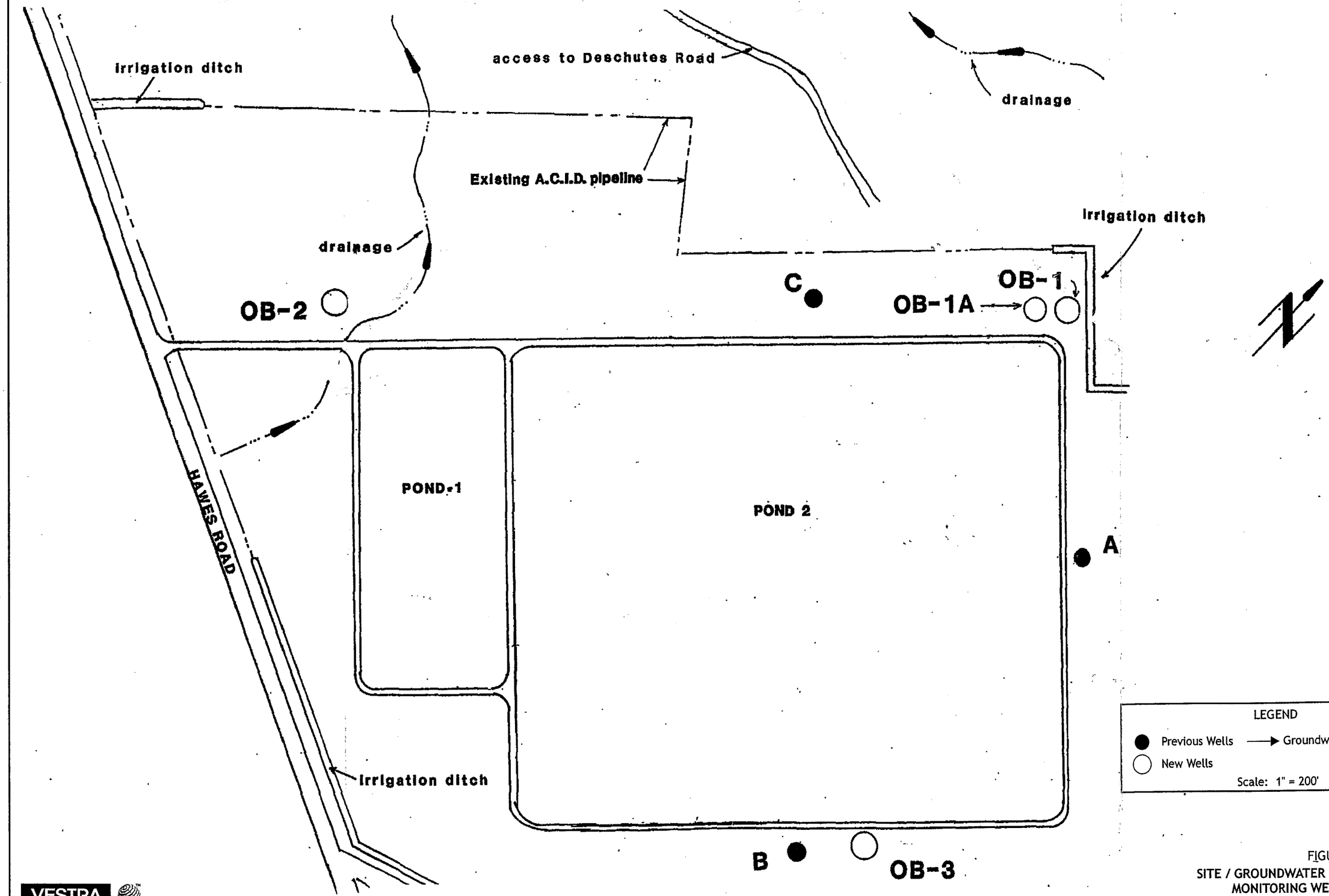
VESTRA

JOB NUMBER 70467

FIGURE 1
GENERAL SITE LOCATION
WINNEMUCCA TRADING COMPANY
ANDERSON, CALIFORNIA

SOURCE: USGS 7.5' QUADRANGLE, COTTONWOOD

MARCH 2005



VESTRA

JOB NUMBER 70467

SOURCE: LAWRENCE & ASSOCIATES

FIGURE 2
SITE / GROUNDWATER ELEVATION CONTOURS / MONITORING WELL LOCATION MAP
WINNEMUCCA TRADING COMPANY
ANDERSON, CALIFORNIA

MARCH 2005

Form 3

PCDD/PCDF TOXICITY EQUIVALENCE SUMMARY
Use for Sample and Blank Results

CLIENT ID.
P-1

Lab Name: Columbia Analytical Services Contract: SDG No:

Lab Code: CAS Method:1613 Case No: Client No: Lab ID: E0401255-001.01

Client Name: VESTRA Sample Wt/Vol: 14.102 g or mL: g

Matrix (Solid/Aqueous/Waste/Ash): Solid Initial Calibration Date: 10/25/04

Sample Receipt Date: 12/03/04 Instrument ID: AutoSpec-Ultima

Ext. Date: 12/14/04 GC Column ID: DB-5

Ext_Vol.(ul):20.0 Inj.Vol.(ul):1.0 Sample Data Filename: U20843#1

Analysis Date: 20-DEC-04 Time: 13:14:38 Blank Data Filename: U20842#1

Dilution Factor: 1 Cal. Ver. Data Filename: U20841#1

Concentration Units (pg/L or ng/Kg dry weight): ng/Kg % Solids/Lipids: 36.97

	CONCENTRATION	TEF(1)	TEF-ADJUSTED CONCENTRATION
2,3,7,8-TCDD	8.78	X 1.0	8.78e+00
1,2,3,7,8-PeCDD	1.24	X 0.5	6.22e-01
1,2,3,4,7,8-HxCDD	1.19	X 0.1	1.19e-01
1,2,3,6,7,8-HxCDD	6.15	X 0.1	6.15e-01
1,2,3,7,8,9-HxCDD	3.41	X 0.1	3.41e-01
1,2,3,4,6,7,8-HpCDD	38.43	X 0.01	3.84e-01
OCDD	306.71	X 0.001	3.07e-01
2,3,7,8-TCDF	104.49	X 0.1	1.04e+01
1,2,3,7,8-PeCDF	1.02	X 0.05	5.12e-02
2,3,4,7,8-PeCDF	1.15	X 0.5	5.74e-01
1,2,3,4,7,8-HxCDF	0.64	X 0.1	6.36e-02
1,2,3,6,7,8-HxCDF	0.44	X 0.1	4.43e-02
1,2,3,7,8,9-HxCDF	*	X 0.1	*
2,3,4,6,7,8-HxCDF	0.43	X 0.1	4.35e-02
1,2,3,4,6,7,8-HpCDF	4.32	X 0.01	4.33e-02
1,2,3,4,7,8,9-HpCDF	0.48	X 0.01	4.83e-03
OCDF	11.30	X 0.001	1.13e-02

Total: 2.245e+01

(1) Taken from 'Interim Procudures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-Dioxin and -Dibenzofurans (CDDs and CDFs) and 1989 Update(EPA/625/3-89/016, March 1989.)

Form 1

PCDD/PCDF ANALYSIS DATA SHEET
Use for Sample and Blank Results

CLIENT ID.
P-1

Lab Name: Columbia Analytical Services Contract: SDG No:

Lab Code: CAS Method:1613 Case No: Client No: Lab ID: E0401255-001.01

Client Name: VESTRA Sample Wt/Vol: 14.102 g or mL: g

Matrix (Solid/Aqueous/Waste/Ash): Solid Initial Calibration Date: 10/25/04

Sample Receipt Date: 12/03/04 Instrument ID: AutoSpec-Ultima

Ext. Date: 12/14/04 GC Column:DB-5

Ext. Vol(ul):20.0 Inj. Vol(ul):1.0 Sample Data Filename: U20843#1

Analysis Date: 20-DEC-04 Time: 13:14:38 Blank Data Filename: U20842#1

Dilution Factor: 1 Cal. Ver. Data Filename: U20841#1

Concentration Units (pg/L or ng/Kg dry weight): ng/Kg % Solids/Lipids: 36.97

ANALYTE	CONCENTRATION FOUND	DETECTION LIMIT	Qual. (1)	ION ABUND. RATIO (2)	RRT (2)	MEAN RRF
2,3,7,8-TCDD	8.779	0.162		0.73	1.001	0.98
1,2,3,7,8-PeCDD	1.244	0.090	J	1.41	1.000	0.98
1,2,3,4,7,8-HxCDD	1.189	0.124	J	1.26	1.000	1.15
1,2,3,6,7,8-HxCDD	6.147	0.140	J	1.28	1.000	0.98
1,2,3,7,8,9-HxCDD	3.412	0.133	J	1.19	1.008	1.05
1,2,3,4,6,7,8-HpCDD	38.429	0.207	B	1.05	1.000	1.01
OCDD	306.709	0.130	B	0.88	1.000	1.05
2,3,7,8-TCDF	104.493	0.203	C	0.80	1.001	1.03
1,2,3,7,8-PeCDF	1.025	0.118	J	1.49	1.000	1.01
2,3,4,7,8-PeCDF	1.147	0.115	J	1.52	1.001	1.08
1,2,3,4,7,8-HxCDF	0.636	0.160	J	1.33	1.000	1.28
1,2,3,6,7,8-HxCDF	0.443	0.176	J	1.34	1.000	1.23
1,2,3,7,8,9-HxCDF	*	0.186	U	*	*	1.32
2,3,4,6,7,8-HxCDF	0.435	0.176	J	0.93	1.000	1.18
1,2,3,4,6,7,8-HpCDF	4.325	0.095	BJ	1.08	1.000	1.53
1,2,3,4,7,8,9-HpCDF	0.483	0.112	BJ	1.05	1.000	1.48
OCDF	11.296	0.133	BJ	0.86	1.003	1.25
Total Tetra-Dioxins	33.613	0.162				
Total Penta-Dioxins	12.271	0.090				
Total Hexa-Dioxins	46.002	0.124				
Total Hepta-Dioxins	78.543	0.207				
Total Tetra-Furans	226.788	0.203				
Total Penta-Furans	7.516	0.115				
Total Hexa-Furans	9.251	0.160				
Total Hepta-Furans	13.475	0.095				

(1) Qualifier U indicates not detected; The K indicates EMPC. The C needs value from second column analysis. The B indicates possible blank contamination.
(2) RRTs and ion ratios are specified in Tables 2 and 9, Method 1613.

Form 3

PCDD/PCDF TOXICITY EQUIVALENCE SUMMARY
Use for Sample and Blank Results

CLIENT ID.
P-2

Lab Name: Columbia Analytical Services Contract: SDG No:

Lab Code: CAS Method:1613 Case No: Client No: Lab ID: E0401255-002.01

Client Name: VESTRA Sample Wt/Vol: 16.102 g.or mL: g

Matrix (Solid/Aqueous/Waste/Ash): Solid Initial Calibration Date: 10/25/04

Sample Receipt Date: 12/03/04 Instrument ID: AutoSpec-Ultima

Ext. Date: 12/14/04 GC Column ID: DB-5

Ext_Vol.(ul):20.0 Inj.Vol.(ul):1.0 Sample Data Filename: U20844#1

Analysis Date: 20-DEC-04 Time: 14:01:31 Blank Data Filename: U20842#1

Dilution Factor: 1 Cal. Ver. Data Filename: U20841#1

Concentration Units (pg/L or ng/Kg dry weight): ng/Kg % Solids/Lipids: 41.17

	CONCENTRATION	TEF(1)	TEF-ADJUSTED CONCENTRATION
2,3,7,8-TCDD	2.37	X 1.0	2.37e+00
1,2,3,7,8-PeCDD	0.23	X 0.5	1.13e-01
1,2,3,4,7,8-HxCDD	0.14	X 0.1	1.36e-02
1,2,3,6,7,8-HxCDD	1.02	X 0.1	1.02e-01
1,2,3,7,8,9-HxCDD	0.73	X 0.1	7.32e-02
1,2,3,4,6,7,8-HpCDD	5.95	X 0.01	5.95e-02
OCDD	78.34	X 0.001	7.83e-02
2,3,7,8-TCDF	21.91	X 0.1	2.19e+00
1,2,3,7,8-PeCDF	0.23	X 0.05	1.13e-02
2,3,4,7,8-PeCDF	0.36	X 0.5	1.79e-01
1,2,3,4,7,8-HxCDF	0.14	X 0.1	1.45e-02
1,2,3,6,7,8-HxCDF	*	X 0.1	*
1,2,3,7,8,9-HxCDF	*	X 0.1	*
2,3,4,6,7,8-HxCDF	*	X 0.1	*
1,2,3,4,6,7,8-HpCDF	0.69	X 0.01	6.86e-03
1,2,3,4,7,8,9-HpCDF	*	X 0.01	*
OCDF	3.27	X 0.001	3.27e-03
		Total:	5.214e+00

(1) Taken from 'Interim Procudures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-Dioxin and -Dibenzofurans (CDDs and CDFs) and 1989 Update(EPA/625/3-89/016, March 1989.)

Form 1

PCDD/PCDF ANALYSIS DATA SHEET
Use for Sample and Blank Results

CLIENT ID.
P-2

Lab Name: Columbia Analytical Services Contract: SDG No:

Lab Code: CAS Method:1613 Case No: Client No: Lab ID: E0401255-002.01

Client Name: VESTRA Sample Wt/Vol: 16.102 g or mL: g

Matrix (Solid/Aqueous/Waste/Ash): Solid Initial Calibration Date: 10/25/04

Sample Receipt Date: 12/03/04 Instrument ID: AutoSpec-Ultima

Ext. Date: 12/14/04 GC Column:DB-5

Ext. Vol(ul):20.0 Inj. Vol(ul):1.0 Sample Data Filename: U20844#1

Analysis Date: 20-DEC-04 Time: 14:01:31 Blank Data Filename: U20842#1

Dilution Factor: 1 Cal. Ver. Data Filename: U20841#1

Concentration Units (pg/L or ng/Kg dry weight): ng/Kg % Solids/Lipids: 41.17

ANALYTE	CONCENTRATION FOUND	DETECTION LIMIT	Qual. (1)	ION ABUND. RATIO (2)	RRT (2)	MEAN RRF
2,3,7,8-TCDD	2.368	0.078		0.79	1.001	0.98
1,2,3,7,8-PeCDD	0.226	0.062	JK	1.97	1.000	0.98
1,2,3,4,7,8-HxCDD	0.136	0.061	JK	1.46	1.000	1.15
1,2,3,6,7,8-HxCDD	1.024	0.067	J	1.27	1.000	0.98
1,2,3,7,8,9-HxCDD	0.732	0.064	J	1.18	1.008	1.05
1,2,3,4,6,7,8-HpCDD	5.951	0.089	BJ	1.05	1.000	1.01
OCDD	78.340	0.152	B	0.88	1.000	1.05
2,3,7,8-TCDF	21.907	0.072	C	0.80	1.001	1.03
1,2,3,7,8-PeCDF	0.226	0.049	JK	2.05	1.000	1.01
2,3,4,7,8-PeCDF	0.358	0.053	J	1.41	1.001	1.08
1,2,3,4,7,8-HxCDF	0.145	0.057	J	1.16	1.000	1.28
1,2,3,6,7,8-HxCDF	*	0.062	U	*	*	1.23
1,2,3,7,8,9-HxCDF	*	0.070	U	*	*	1.32
2,3,4,6,7,8-HxCDF	*	0.066	U	*	*	1.18
1,2,3,4,6,7,8-HpCDF	0.686	0.056	BJ	1.00	1.000	1.53
1,2,3,4,7,8,9-HpCDF	*	0.068	U	*	*	1.48
OCDF	3.268	0.146	BJ	0.96	1.003	1.25
Total Tetra-Dioxins	2.774	0.078				
Total Penta-Dioxins	0.818	0.062				
Total Hexa-Dioxins	7.275	0.061				
Total Hepta-Dioxins	13.285	0.089				
Total Tetra-Furans	40.725	0.072				
Total Penta-Furans	1.893	0.053				
Total Hexa-Furans	0.924	0.057				
Total Hepta-Furans	2.114	0.056				

(1) Qualifier U indicates not detected; The K indicates EMPC. The C needs value from second column analysis. The B indicates possible blank contamination.
(2) RRTs and ion ratios are specified in Tables 2 and 9, Method 1613.

CAS, INC.
2378-TCDF ANALYSIS DATA SHEET
Use for Sample and Blank Results

CLIENT ID
P-1

Lab Name: Columbia Analytical Services

Episode No.:

Client Name: VESTRA

Lab Sample ID: E0401255-001.01

Matrix (aqueous/solid/leachate): Solid

Sample Wt/Vol: 14.102g or mL: g

Sample Receipt Date: 12/03/04

Initial Calibration Date: 08/06/03

Ext. Date: 12/14/04

Instrument ID: 70S

Analysis Date: 21-DEC-04 Time: 14:06:43

GC Column ID: DB-225

Extract Volume (ul):20.0

Sample Data Filename: A20385#5

Injection Volume (ul):1.0

Blank Data Filename: A20384#3

Dilution Factor: 1

Cal. Ver. Data Filename: A20384#2

Concentration Units (pg/L or ng/Kg dry weight): ng/Kg % Solids(Lipid): 36.97

ANALYTE	CONCENTRATION FOUND(1)	DETECTION LIMIT	Q	ION ABUND. RATIO	RRT	TEF
2,3,7,8-TCDF	94.950	1.691		0.66	1.001	9.495

INT. STANDARD	SPIKE CONCENT.(pg)	CONCENT. FOUND(pg)	RECOV. %	ION ABUND. RATIO	RRT
13C-2,3,7,8-TCDF	2000	1231.54	61.58	0.75	1.06
CLEANUP STANDARD					
37Cl-2,3,7,8-TCDD	800	655.09	81.89		0.99

(1)'*' indicates non-detected.

Data Qualifier Flags

- **B** Used when the analyte is found in the associated blank, as well as in the sample
- C Indicates the value for the TCDF analyte must be obtained from the DB-225 confirmation column
- **E** Indicates an estimated value – used when the analyte concentration exceeds the upper end of the linear calibration range
- **J** Indicates an estimated value – used when the analyte concentration is below the method reporting limit (MRL) and above the detection limit (DL)
- **K** EMPC; maxiumum possible concentration estimated
- **U** Indicates the compound was analyzed and not detected.
- **X** User defined; see case narrative for detailed explanation
- **Y** Indicates the recovery of the labeled standard is outside the established control limits
- * Indicates concentration is reported as 'Not Detected'

CAS, INC.

2378-TCDF ANALYSIS DATA SHEET

Use for Sample and Blank Results

CLIENT ID

P-2

Lab Name: Columbia Analytical Services

Episode No.:

Client Name: VESTRA

Lab Sample ID: E0401255-002.01

Matrix (aqueous/solid/leachate): Solid

Sample Wt/Vol: 16.102g or mL: g

Sample Receipt Date: 12/03/04

Initial Calibration Date: 08/06/03

Ext. Date: 12/14/04

Instrument ID: 70S

Analysis Date: 21-DEC-04 Time: 14:41:19

GC Column ID: DB-225

Extract Volume (ul):20.0

Sample Data Filename: A20385#6

Injection Volume (ul):1.0

Blank Data Filename: A20384#3

Dilution Factor: 1

Cal. Ver. Data Filename: A20384#2

Concentration Units (pg/L or ng/Kg dry weight): ng/Kg % Solids(Lipid): 41.17

ANALYTE	CONCENTRATION FOUND(1)	DETECTION LIMIT	Q	ION ABUND. RATIO	RRT	TEF
2,3,7,8-TCDF	20.526	0.961		0.67	1.001	2.053

INT. STANDARD	SPIKE CONCENT.(pg)	CONCENT. FOUND(pg)	RECOV. %	ION ABUND. RATIO	RRT
13C-2,3,7,8-TCDF	2000	1381.90	69.10	0.78	1.06
CLEANUP STANDARD					
37Cl-2,3,7,8-TCDD	800	691.52	86.44		0.99

(1)'*' indicates non-detected.

Data Qualifier Flags

- **B** Used when the analyte is found in the associated blank, as well as in the sample
- C Indicates the value for the TCDF analyte must be obtained from the DB-225 confirmation column
- **E** Indicates an estimated value – used when the analyte concentration exceeds the upper end of the linear calibration range
- **J** Indicates an estimated value – used when the analyte concentration is below the method reporting limit (MRL) and above the detection limit (DL)
- **K** EMPC; maxiumum possible concentration estimated
- **U** Indicates the compound was analyzed and not detected.
- **X** User defined; see case narrative for detailed explanation
- **Y** Indicates the recovery of the labeled standard is outside the established control limits
- * Indicates concentration is reported as 'Not Detected'

CAS, INC.

2378-TCDF ANALYSIS DATA SHEET

Use for Sample and Blank Results

CLIENT ID

P-2

Lab Name: Columbia Analytical Services

Episode No.:

Client Name: VESTRA

Lab Sample ID: E0401255-002.01

Matrix (aqueous/solid/leachate): Solid

Sample Wt/Vol: 16.102g or mL: g

Sample Receipt Date: 12/03/04

Initial Calibration Date: 08/06/03

Ext. Date: 12/14/04

Instrument ID: 70S

Analysis Date: 21-DEC-04 Time: 14:41:19

GC Column ID: DB-225

Extract Volume (ul):20.0

Sample Data Filename: A20385#6

Injection Volume (ul):1.0

Blank Data Filename: A20384#3

Dilution Factor: 1

Cal. Ver. Data Filename: A20384#2

Concentration Units (pg/L or ng/Kg dry weight): ng/Kg % Solids(Lipid): 41.17

ANALYTE	CONCENTRATION FOUND(1)	DETECTION LIMIT	Q	ION ABUND. RATIO	RRT	TEF
2,3,7,8-TCDF	20.526	0.961		0.67	1.001	2.053

INT. STANDARD	SPIKE CONCENT.(pg)	CONCENT. FOUND(pg)	RECOV. %	ION ABUND. RATIO	RRT
13C-2,3,7,8-TCDF	2000	1381.90	69.10	0.78	1.06
CLEANUP STANDARD					
37Cl-2,3,7,8-TCDD	800	691.52	86.44		0.99

(1)'*' indicates non-detected.